Assignment

1) Decide together with your group members on a topic related to „new technology".

   (This „new technology" does not need to exist now. If you want, you can be creative and come up with some future technology)

2) Explain the new technology you choose in 1) and describe its positive aspects.

3) Formulate problems that might occur due to the use of the new technology you choose in 1).

   "The solution to any problem lies in asking the right questions"

4) Come up with a question related to the problem(s) in 3) and answer it by using Polya's four step problem solving method.

Create a presentation where you present your results of 1) - 4) .

Assignment

Recall Polya's four step problem solving method:

❖ What are you asked to find or show?
❖ Can you restate the question in your own words?
❖ What part/information of the question is (un)important?
❖ Is there enough information to enable you to find a solution?
❖ Do you understand all the words used in stating the question?
❖ Do you need to ask a question to get the answer?
❖ Why might this question be difficult/easy?

1 **Understand the question**

❖ Draw pictures or diagrams.
❖ Eliminate possibilities.
❖ Be systematic.
❖ Solve a simpler version of the question & Consider special cases.
❖ Guess and check. Trial and error. Guess and test.
❖ Look for a pattern or patterns.
❖ Make a list / Write down keywords.

2 **Make a plan**

❖ Try to use the strategy chosen in step 2.
❖ If this strategy does not work, try another one.

3 **Carry out the plan**

❖ Did you answer the question? Is your result reasonable?
❖ What would change if you change the question a bit?
❖ Is there a better/more interesting version of the question?
❖ Is there another way of answering the question, which may be simpler?
❖ Can the question or method be generalized to be useful for future questions?

4 **Look back & Review**